

## NEW ROBBER FLIES (DIPTERA: ASILIDAE) FROM MAYAGUANA ISLAND, BAHAMAS, AND CUBA<sup>1</sup>

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**ABSTRACT:** Two new species of robber flies, *Ommatius setiferous* from Mayaguana Island in the Bahamas and *O. lineolatus* from Cuba, are described. Illustrations of the male terminalia of each species are included. This report increases the number of *Ommatius* species in the Bahamas to four and in Cuba to five.

After completing a revision of West Indian *Ommatius* Wiedemann (Scarbrough 1984a, b, 1985a, b; Curran 1953), a new species from Mayaguana Island in the Bahamas and one from Cuba were sent to me for study. Both species are quite distinct and are described here to facilitate other studies in progress. Presently 7 species, not including the 2 described herein, are known from the Bahamas Islands and Cuba; all 7 are known only from the type localities (Scarbrough 1985b; Curran 1953). This report increases the number of species in the Bahamas to 4 and in Cuba to 5.

### *Ommatius setiferous*, new species

Figure 1 a-g

**Diagnosis.** This large species is unlike any species thus far reported from the Bahama Islands and Cuba. It runs to couplet 6 in Scarbrough's key (1985b) but differs radically from *O. membranous* Scarbrough and *O. cubanus* Scarbrough in the larger size, color of the legs, and vestiture of the scutellum, forecoxa, and hindfemur. The swollen hindfemur is similar to *O. hanebrinki* Scarbrough and Rutkauskas (1983) and *O. hispidus* Scarbrough (1985b) but neither have a large tubercle on the hindfemur nor a wing with a strongly produced costal margin.

**Male:** Body black, length  $\bar{X}$ =14.5, R=13.0-15.6. Face, frons and occiput white to slightly yellowish pollinose, frons with small brown spot medially. Vestiture of face, palpus, frons, scape and pedicel, whitish; 7 to 12 black postocular bristles present, dorsal 1 or 2 strongly proclinate, none unusually long. Face/head width ratio  $\bar{X}$ =1/6.1, R=1/5.2-1/6.7. Flagellum width/length ratio  $\bar{X}$ =1/1.3, R=1/1.2-1/1.3; stylus shiny black with numerous black hairs below.

Scutum largely brown pollinose, lighter brown to slightly brownish-gray in grooves, above wings, and posteriorly; all black scutal bristles as follows: 4 lateral and 3 or 4 dorsocentral bristles on each side plus 3 or 4 black hairs near supra-alar bristle; abundant white hairs

<sup>1</sup>Received August 1, 1987. Accepted October 9, 1987.

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between rows of dorsocentral bristles posteriorly, on humeral callus, and above wing. Scutellum grayish pollinose apically, light brown basally with abundant, thin, white hairs dorsally; bristles absent. Pleuron largely grayish pollinose, an- and katepisternum partially brownish to yellowish; hairs generally sparse and white. laterotergite with yellowish bristles. Halter yellow to orangish-red.

Wing with costal margin strongly produced; subcostal cell largely and 1st radial cell bordering veins narrowly brown, microtrichiae dense on anterior apical 1/2 or slightly more, sparse elsewhere. R-m crossvein very short, at or slightly before middle of discal cell. First medial cell wide, base of cell and constriction beyond middle subequal to width of cell at basal 1/3. Furcation of vein R4+5 at base of 1st medial cell.

Coxae with whitish vestiture except 3 or 4 thick, black forecoxal bristles. Femora largely black with mostly whitish to yellowish vestiture; hairs abundant, long and thin on basal 1/2 ventrally; narrow base of fore- and midfemora, basal 1/5 to 1/4 of hindfemur and apical 1/4 to 1/3 of each femur, orangish-red. Forefemur with 2 or 3 short, whitish bristles on basal 1/3 to 1/2, 1 anterodorsally and 1 or 2 anteroventrally. Midfemur with 6 anterior bristles, 1 or 2 of these black, and 1 posterior, pre-apical bristle. Hindfemur (Fig. 1a, b) swollen, width/length ratio 1/3.7, with 4 to 5 anterior and 7 to 9 anteroventral bristles; basal 1/3 with dense cluster of 15 to 18 black bristles arising from prominent ventroposterior tubercle; apical 1/2 of posterior surface of hindfemur with several scattered whitish bristles. Tibiae with apices brown to dark brown, most bristles black; hindtibia (Fig. 1b) with 1 long, thick apical bristle and 1 peglike pre-apical bristle, both black. Each tarsus with basal 2 segments largely orangish-red, apices and segments 3 to 5 blackish; foretarsus with 3 or 4 yellowish to orangish bristles.

Abdomen slightly constricted at junction of segments 2 and 3; ground color blackish to brownish-red. Terga mostly brown pollinose with brown hairs; wide lateral margin and narrow apex of each tergum and all sterna slightly brown or yellow to yellowish-gray pollinose with whitish hairs.

Terminalia (Fig. 1c-g) orangish-red with slight sooty black tint. Ventral lamella with apical 1/2 narrow. Basal 1/2 of epandrium wide with black hairs, apical 1/2 abruptly narrowed and slender, apex rounded, hairs yellow. Hypandrium with abundant yellow pile and numerous yellow hairs medially. Gonocoxite with large toothlike process. Gonostylus flat, elongately triangular. Exposed aedeagus somewhat flat and wide, width about 2/3 its length, dorsal surface horizontal and slightly convex.

Female: Unknown.

**Holotype** ♂. BAHAMA ISLANDS: Mayaguana I., Abraham Bay, IV.24.1983. Arnold S. Menke. Paratypes 2 ♂, same data and collector as holotype. In U.S. National Museum.

**Etymology.** The species name refers to the cluster of black bristles found on the ventral tubercle of the hindfemur.

### *Ommatius lineolatus*, new species

Figure 2a-d

**Diagnosis.** *Ommatius lineolatus* is the smallest species (6.9 mm) reported from the Bahamas and Cuba. This species is unusual in that it has only 5 to 6 hairs on the antennal stylus. *Ommatius abana* Curran, a related Bahamian species, has 4 hairs on the stylus. *Ommatius lineolatus* differs from *O. abana* in its smaller size, the femora and anterior 2 tibiae are yellow with brown apices, the hindtibia is largely brown, the body is brown with mostly whitish to yellowish pollen, and the vestiture of the palpus is brown. *Ommatius abana* is slightly larger (9.0 mm), the femora and anterior 2

tibiae are largely red with black apices, and the body is black with white pollen and white hairs.

Male: Length 6.9 mm, body brown. Face yellowish-grey to yellow pollinose; mystax white and dense, hairs sparse on dorsal 1/2 of face with 4 long thin brown bristles; width of face/head ratio 1/6.7. Palpus yellowish-brown with brownish vestiture. Proboscis brown, base and apex narrowly yellowish to yellowish-brown. Frons light brownish-yellow to yellow pollinose with brown vestiture. Antenna with brown vestiture; pedicel with one long subapical

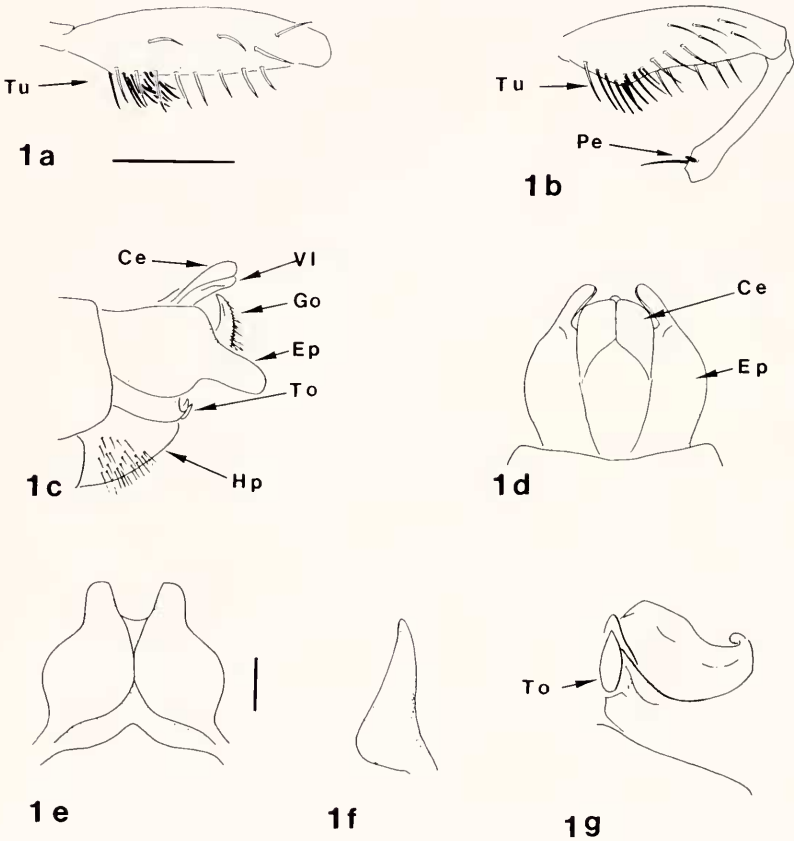


Fig. 1. *Ommatius setiferous*, n. sp.: 1a. Hindfemur with ventral setaceous tubercle and bristle pattern, anterior view; 1b. Hindfemur and hindtibia with ventral setaceous tubercle and bristle pattern, posterior view; 1c. Male terminalia, lateral view; 1d. Male terminalia, dorsal view; 1e. Ventral lamella; 1f. Left gonostylus; 1g. Right gonocoxite. Abbr.: Ce=cercus, V1=ventral lamella, Ep=epandrium, Hp=hypandrium, To=toothlike process of gonocoxite, Go=gonostylus, Tu=ventral tubercle of hindfemur, Pe=peg-like bristle of hindtibia.

ventral bristle, bristle about 1.7 times length of flagellum; stylus with 5 ventral hairs; width/length ratio of flagellum 1/1.7. Occiput largely grayish to whitish pollinose with white hairs, slightly yellowish immediately behind vertex; 3 postocular bristles on each side, 2 brown and 1 whitish, all short and slightly proclinate.

Scutum mostly brown pollinose, lateral and posterior margins grayish to weakly yellow pollinose; 4 lateral and 2 or 3 brown dorsocentral bristles on each side, hairs generally sparse and whitish. Scutellum yellowish-gray to yellow pollinose, margin with 2 bristles and 2 short brown hairs. Pleuron largely gray to whitish pollinose with whitish vestiture, anepisternum yellowish pollinose. Epimeral bristle absent. Halter yellow.

Wing without costal dilation, microtrichae dense on anterior 1/2 or slightly more, sparse or absent otherwise. R-m crossvein beyond middle of discal cell; first medial cell narrow, base about 1/3 width of cell at basal 1/3; furcation of posterior branch of radial vein well beyond base of 1st medial cell.

Coxae grayish pollinose with whitish vestiture. Trochanter brown; all femora, tibiae and basal segments of fore- and midtarsi mostly yellow with yellow hairs, brown as follows: apical 1/4 or less of all femora and anterior 2 tibiae, hindfemur with narrow band at or just before middle, hindtibia and anterior 2 tarsi largely, and hindtarsus entirely. Midfemur with 4 or 5 anterior bristles or bristly hairs and 1 posterior pre-apical bristle present, all brown. Hindfemur slender, width/length ratio 1/5.6, bristles and bristly hairs whitish to weakly yellow except for 1 anterior pre-apical bristle; 2 anterior bristles and 6 or 7 bristles present in each ventral row. Tibiae with 1 to 3 brown bristles, remaining bristles yellow. Hindtarsus with 1 and fore- and midtarsi with 3 or 4 yellowish bristles, remaining bristles brown.

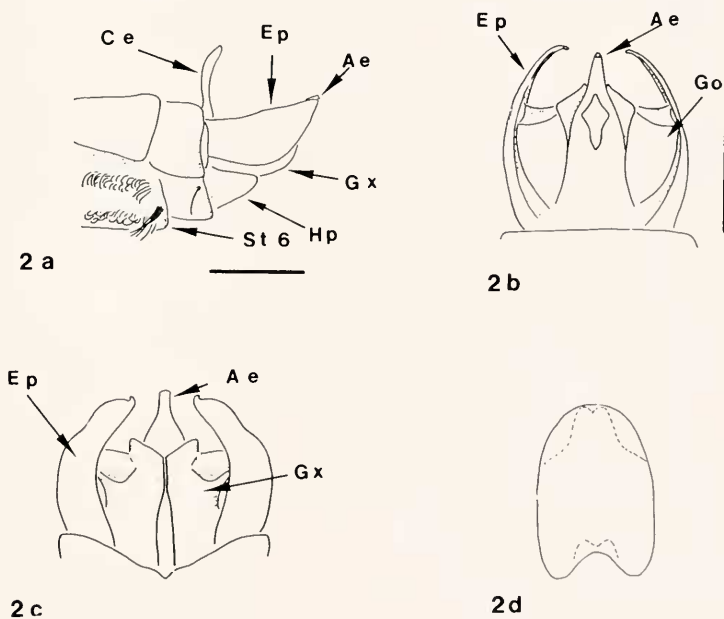


Fig. 2. *Ommatius lineolatus*, n. sp., male terminalia; 2a. Lateral view; 2b. Dorsal view; 2c. Ventral view; 2d. Ventral lamella. Abbr. See Figure 1. Ae=aedeagus, St=sternum.

Abdomen brown to brownish-yellow; sterna 1-5 with narrow longitudinal stripe devoid of pollen. Pollen mostly yellow to yellowish-gray, that on most terga brownish with brown hairs, remaining hairs mostly whitish to weak yellow; sternum 6 (Fig. 2a) with 3 brown, medio-apical bristles and 2 elongate, dense clusters of weak, pencil-like hairs; hairs largely yellowish with apices pendulate, apical end of each cluster with 7 or 8 brown hairs. Sternum 7 with all brown hairs and 2 midlateral pre-apical brown bristles.

Terminalia (2a-d) largely brown with mostly brown hairs. Apical 1/3 of epandrium broadly convex below, yellowish-brown to yellow with yellowish hairs. Gonostylus and gonocoxite yellow, both appressed to aedeagus laterally and below. Aedeagus long, apical 1/3 slightly arched upward, tip extending to apex of epandrium.

**Female:** Differs from male as follows; length 7.1 mm, face/head width ratio 1/6.2; flagellum width/length ratio 1/1.5. Mystax not unusually dense, proboscis wholly blackish, hairs of face and frons whitish to pale yellow. Stylus with 5 to 6 hairs; 3 brown postocular bristles present. Margin of scutellum with 1 weak brown hair and 3 whitish or pale yellow weak bristles or hairs. Midfemur with only 2 anterior bristles, all anteroventral bristles weak, pale yellowish to whitish. Hindtibia mostly dark brown, narrow base yellow. Sternum 6 of abdomen without cluster of dense pendulant hairs, sterna 6-7 with several brown bristly hairs apically. Length of sternum 8 about 1.3 times width, apical margin with moderately deep median notch. Tergum 8 narrow, apical corner not extending below cercus. Cercus triangular, apex rounded. Spermathecal glands obovatus.

**Holotype** ♂ and **allotype** ♀, CUBA: Herradura, 2-20/32. Bruner y Otero, col. In U.S. National Museum.

**Etymology.** The species name refers to the short, pendulate pencil-like hairs on sternum 6 of the male.

#### ACKNOWLEDGMENTS

The following are thanked for assistance in this study: Lloyd Knutson, Systematic Entomology Laboratory, ARS, USDA., % United States National Museum, Washington, D.C. for loan of specimens and providing working space; Randall T. Schuh, Department of Entomology, American Museum of Natural History, New York, N.Y., for the loan of the type *Ommatius abana* Curran; Raymond Gagné, ARS, USDA, % U.S. National Museum, Washington, D.C. and Phillip Creighton, Department of Biological Sciences, Towson State University, Towson, Maryland, for critical review of an early draft of the manuscript; Jamie Martin, Towson State University, for illustrating the hindfemur and hindtibia; and the Faculty Research Committee, Towson State University, for funding this study.

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